

# HI-Q

## THE LAKEHEAD AMATEUR RADIO CLUB JOURNAL

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LARC, Suite 184, 1100C Memorial Ave., Thunder Bay, Ontario, Canada, P7B 4A3

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Last Issue until September. Have a safe summer and Holidays 73 & 88 HI-Q Editor VA3WRL, Wayne

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Field Day! Field day! @ Hazelwood Conservation Area!!!

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### The Prez Say's

#### Hi Folks

As you all know, time is quickly passing and once again it is time to be thinking about field day. This year it will be held on June 27-28 at the Hazelwood Conservation Area, 14 km north of Dawson Rd. (Redriver Rd.). The Lakehead Conservation Authority has given us permission to use the beach area including the cabin. The cabin is about 24ft x 24ft in size. It will be covered by our insurance. The Board of Directors asks that once vehicles are unloaded that they be returned to the main parking area. (They don't want other people to get the idea that they can park in that area.) We also have use of the out door barbeque. Swimming should be excellent and canoes can be paddled on the lake. "No motors!"

The main planning will be done at the June meeting. For now all that I ask is that you give serious consideration to joining us. The more people we have, the merrier it will be. Even if you cannot help set-up, operate for 24 hrs and help dismantle, we need you there for as long as you can stay.

At this time I also want to thank all the people in the Lakehead Amateur Radio Club who have worked so hard to make things happen. I am not going to name individuals because I would naturally forget someone but the list is very long. There is an incredible amount of talent in the Lakehead Amateur Radio Club. It ranges from electronic geniuses to people with all kinds of various talents together these people worked together to give us an incredible year. I do not want to say too much right now because the year is not over yet and there is still a great deal to do.

In closing, I just want to say to everyone that try to get to the next meeting and join in the fun of planning for Field day 98 and join us on June 27 and 28 and make it happen! Experimenters are welcome!!

Have beautiful summer!!

Ian Mellis, VA3RIM

### Vests are ready !

If you ordered a vest they are ready ! Please call Jan, VA3JRS at 344-3222. Jan did a nice job in making the vests and they really make the grade so please make sure you pick yours up thanks. HI-Q Ed. Wayne, VA3WRL

### Winners

The winner of this months Java Hut meals are:  
Dan, VE3DWP Al, VA3AMY and Ed, VE3SNW.  
Enjoy your meals peoples and live long and prosper, 73

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**1997/1998 LARC****Founding President**

P. J. (Pat) O'Shea VE3FW

LARC maintains the Club call VE3FW  
to honour the memory of our first  
President Mr. Pat O'Shea.

**Senate**

Bill Roberts VE3ARN  
Keith Fiske VE3JQ  
Bert Lambert VE3BKY  
Ray Greer VE3CH  
Bill Klemacki VE3AJ

**Executive Board**

President: Ian Mellis ..... VA3RIM ..... 577-1628  
Vice Pres: Ed Baumann ..... VE3SNW ..... 622-1216  
Secretary: Norm Bell ..... VE3XRC ..... 577-9316  
Treasurer: John Watson ..... VE3GTX ..... 683-3199  
Directors: Judy LeFevre ..... VA3EAP .....  
Sam Shonias ..... VA3SAM .....  
Bob Hanson ..... VE3RVA ..... 767-6924  
Jan Sokoloski ..... VA3JRS ..... 344-3222  
Past Pres: Terry Stewardson .... VE3TKA ..... 577-9439

**Appointments**

Mem. Sec.: John Watson ..... VE3GTX ..... 683-3199  
Hi-Q Editor: Wayne Letang ..... VA3WRL ..... 344-9759  
Emergency Coordinator: Randy Gottfred, VA3GOT.....939-2310

**Club Repeaters**

VE3YQT 147.060 - OFFSET  
VE3TBR 146.820 - OFFSET

## **Next Meeting**

### **June 11, 1998**

Meetings are held at 7:30 pm every second Thursday of each  
month  
at Confederation College in room 207B in the McIntyre  
Building.

### **Minutes of a Meeting of the Lakehead Amateur Radio Club held in Room 207B at Confederation College, Thunder Bay, Ontario on May 14, 1998**

The meeting was called to order at 7:30 pm by the President,  
VA3RIM Ian Mellis with 25 members in attendance.

**Minutes of the previous meeting:**

The minutes of the previous meeting held April 9, 1998 were  
published in detail in the May edition of "HI-Q" and distributed to  
all members.

**Motion:** moved by VE3BHN, Bob Gillespie and seconded by  
VA3ROM, Bob Mazur that the minutes be accepted as distributed.  
**Carried.**

**Correspondence:**

-Club licences from Industry Canada  
-letter from Shopper's Drug Mart re 10 Mile Road Race  
-letter from Thunder Bay Regional Hospital re 4th Annual Walk  
For Hearts  
-letter from CNIB re Blind Amateur Radio Program

**Treasurer's Report:** due to the absence of VE3GTX, John  
Watson, the Treasurer's Report was not available.

**Old Business:**

**Auditor's Report:** VE3KRH, Steve Robb reported that he and  
VE3PD, Pat Doherty had examined the Club financial statements  
and had found everything to be in order.

**Safety Vests:** are now ready. Some have already been picked up  
and used with good comments. Wash in cold water and hang to  
dry. If alterations are required, call VA3JRS, Jan Sokoloski

**Field Day:** VA3RIM, Ian Mellis reported that the Field Day  
Committee had met and suggested Silver Harbour or Hazelwood  
Lake as potential field day sites. VA3RIM Ian Mellis, VA3GOT  
Randy Gottfred and VE3XRC Norm Bell went out to Hazelwood  
Lake and the picnic area appears to suit our needs. A letter has  
been sent to the Conservation Authority requesting the use of  
Hazelwood Lake and will be put on the agenda for their May  
meeting.

**Committee Reports:**

**Public Service:** due to the absence of VE3ZG, Mike Nawrocki,  
VE3XRC Norm Bell reported that 5 operators assisted the  
Salvation Army on May 4 and 6 operators participated at the Run  
For Women May 9. Volunteers have been recruited for the 10  
Mile Road Race scheduled for May 18.

**Classes:** VE3SNW, Ed Baumann reported that the classes for this  
year are almost finished. Tom Bishop has written and passed his  
basic, so the call VE3JAB will soon be back on the air. VE3XRC,  
Norm Bell reported that the code classes have also finished for the  
year. VE3MAJ, Bob Barker was successful in passing his 5 wpm.

**RAC:** VE3PD, Pat Doherty stated that in the States they are taking  
a run at the 440 band by land based commercial interests. RAC  
board is asking Industry Canada for an amateur with a basic plus  
5 wpm to be able to use 10m all modes. Pat will be attending the  
RAC Annual Meeting next week.

**Emergency Measures:** VA3GOT, Randy Gottfred reported that a  
new 2m antenna had been installed at McKellar Hospital. the

**Don't miss a single copy of HI-Q. Send your change of address notice to the Club.**

Lakehead Amateur Radio Club History Project

telephone callout tree is being worked on.

**Equipment:** VE3TKA, Terry Stewardson reported that VE3TBR had been off the air. It was a computer problem and it was fixed. the 10m repeater is up and running. Terry's repeater is presently situated on Battle Island just off Rosspoint thanks to VE3INI, Andy Malcolm. The call sign is VE3BGA and the frequency is 147.390 (+).

#### New Business:

**CNIB Amateur Radio Program:** a letter has been received from the CNIB looking for financial support for their Amateur Radio Program which helps visually impaired people get on the air.

**Motion:** moved by VA3ROM, Bob Mazur and seconded by VE3AVS, Dave Kimpton that the Lakehead Amateur Radio Club donate \$ 100.00 to the CNIB Amateur Radio Program. **Carried.**

**Adjournment:** moved by VA3MOB, Moe Bell and seconded by VE3SNW, Ed Baumann that the meeting be adjourned.

Following a short break, VE3AJ, Bill Klemacki presented a slide show of Field Days in the late 1960s and early 1970s. Boy, does 25 years make a difference to the looks of such notables as VE3AXL and VE3XT.

## Public Service By Mike Nawrocki

We are back from sunny southern Ontario where we actually saw some rain along with gorgeous weather. Managed to get in a couple of rounds of golf, did a little swimming and sunbathing, and took in a few of the sites. After a long lay-off, three events have kept our volunteers sharp providing some communication coverage. On May 4, the Salvation Army fund drive was held with Terry VE3TKA, Ed VE3SNW, Carl VA3PEP, Wayne VA3WRL and Norm VE3XRC providing the

communication and co-ordination facilities. The Run for Women took place around Boulevard Lake as usual on May 9. If the weather forecasters from Toronto were right, it sounded as if the day was ideal for this annual event. Participating in keeping an eye on things were Archie VA3HWA, Chris VA3TBA, Carl VA3PEP, Dan VE3DWP, and Norm VE3XRC. The Legion 10 mile road race took place on a beautiful Victoria Day with the sun shining brightly and the temperature just about ideal. The conditions led to a record field of more than 400 racers to participate, with some very good times recorded and close finishes. Thanks to Chris VA3TBA who did double duty by manning two checkpoints, John VE3PHL, I got your message on my answering machine, but it was too late to call you as you were already working the race; Ian VA3RIM, Pat VA3PP, Dan VE3DWP, Carl VA3PEP, Jan VA3JRS, Linda VE3XLB and Norm VE3XRC. Thanks Norm for coordinating the events, and to all who helped out. Events like this keep the batteries from getting rusty. One more event to go yet this month. Eric VE3XET with some help has the HIP HIP HOORAY event at Lakehead University on May 31st. Not much rest in June, as one new event takes place on June 6th, the June Classic, a 5 and 10K walk or run around Boulevard Lake. Jan VA3JRS has taken on the organization of this one. One week later, on June 13th, the 4th Annual Walk for Hearts will take place at the Confederation College fitness centre. This event is held to support Cardiac Care, and according to Terri Hrkac, Development Officer for the Thunder Bay Regional Hospital Foundation, almost \$14,000 was raised in last years event. Eric VE3XET has agreed to coordinate this event again this year with a little help. Also, do not forget Field Day comes up at the end of June, the triathlon in July, and the Air Show in August. Since this is the last issue of HI-Q until September, I hope everyone has a good summer and keep those batteries charged and ready, you never know what emergency may arise. 73!!! Mike Nawrocki, VE3ZG

## Battle Island Repeater

Battle Island Lighthouse is about 82 miles from Thunder Bay bearing 072 degrees and is located 6 miles from Rosspoint. Manned by 2 light keepers until a few years ago when , after various stages of automation, the light keepers were gone for good.

About 2 years ago I was working on some Coast Guard equipment at Battle Island Lightstation. Since I just happened to have my 2 meter HT with me I climbed to the top of the lighthouse and tried to call up YQT. Wouldn't you know it, Dave VE3AVS came back with a pretty good signal report. He then tried working me on 52 simplex and the signal was still pretty good. This was on the stock rubber duck HT antenna and so I began to wonder what a "real antenna" and a repeater could do. I tried a few other Coast Guard sites but all things considered Battle was the easiest to access and had AC power year round. Another trip this past March confirmed a few details such as possible equipment location, antenna mounting requirements, and AC wiring. Another test with Dave, but this time only YQT would work, as we were unable to make contact via simplex. I could however also hear TBR although I was unable to key it up. So we had the location, AC power, and antenna mounting was well in hand. I then asked for and received permission to locate a repeater at the lighthouse.

It was time to get some equipment together. Terry VE3TKA provided his repeater that had been used as CJ3FW during the jamboree on 147.390 (+ offset). I changed the ID to VE3BGA set the deviation and promptly connected the jugs to a spare marine antenna at work. I had only been transmitting for a few seconds doing some fine-tuning when I heard "nice signal". It was Dave again! Gee, that guy is everywhere. The repeater was for about 3 weeks under test.

I got into work one day and got the word that there was a trip to Battle so I hastily packed up the repeater and some test equipment, called John VE3EMI to locate an antenna loaned from Terry, hoped I hadn't forgotten anything and set off by



truck with the base electrician for Rossport. The weather in Thunder Bay was great, but as we passed Nipigon the fog started. As we loaded the boat in the fog at Rossport dock we turned on the radar and peered over the charts to locate Battle Island. As we cast off, the dock disappeared behind us but no problem, we had radar right! Well as it turns out it was only a little river radar and as such not much use at any distance and with all the clutter from the mist and rain we very quickly learned to navigate by following shorelines. We managed to find the Island eventually and after securing the boat walked up the trail to the light keeper's house. Bert has been retired for several years and has the notoriety of having been the last light keeper on the Great Lakes. He has been given permission to stay at the Island for the summer months in return he is responsible for the upkeep of the property. He removed the coffee can from the exhaust pipe and fired up the 1940's vintage tractor to transport the equipment. We loaded all the gear, put the repeater into the tractor's bucket and off we went. After carrying everything up the stairs to the top of the lighthouse the equipment was connected. We mounted the ground plane to the mast and by this time the wind was at about 40 knots and it was getting late. There was only going to be one shot at the antenna considering the deteriorating weather. I climbed down the staircase to the floor below and tried the MFJ antenna analyzer. It didn't look too good. The antenna wasn't resonant and then the batteries died (I remember Skip telling me how those things eat batteries). I connected the repeater to the Bird thurline and alas the dreaded hi VSWR. It was time to leave before we had to spend the night so back to Rossport through the fog again, but it seemed a lot easier this time.

So we now have a repeater at Battle Island with a questionable antenna, but it is on the air. I was talking to VE3UQM Walter in Terrace Bay and he was using it to work a ham in Rossport and was to try a QSO with a friend in Marathon. Dave VE3AVS has managed to hit it but not very often. I could hit the repeater from the highway until 10 km east of Nipigon. A good propagation check for the area is the Coast Guard marine

weather broadcast near Schreiber on 161.65 Mhz. If you can hear it in Thunder Bay with good quieting, conditions should be favourable to VE3BGA.

By the time you read this the antenna should be replaced and perhaps many more of us will be able to work the Battle Island repeater. This is only intended as an evaluation and if it does work out well through the summer it might be time to consider a more permanent installation with the possibility of linking to YQT.

*Andy Malcolm, VE3INI*

### Battle Island Lighthouse



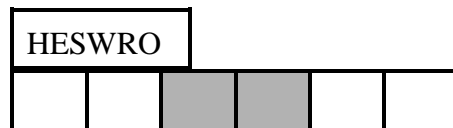
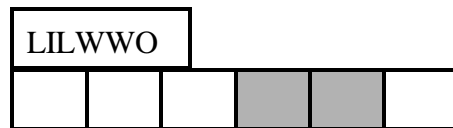
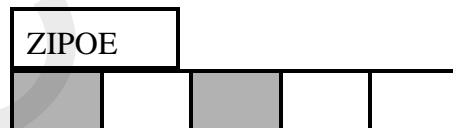
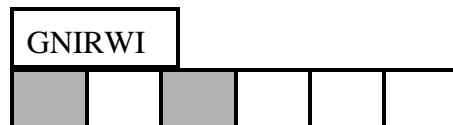
*White space for Len !*

### HAM PUZZLER

By Dave VE3AVS

Unscramble the four jumbled words. Then arrange the shaded letters to form a word or words associated with the call sign shown below. Answer is on the last page.

V E 3 X T



May answers: VALVES, ADJUST, HEATER, ARCING  
VA3AMY = JAVA HUT  
See you in the Fall....73.

*When in doubt mumble, I do  
it keeps your friends  
confused as you are. Old-  
one-boot...*

## Thunder Bay Frequencies

275.8000----AIR (AIRPORT)  
 363.8000----AIR (AIRPORT)  
 119.2000----AIR (AIRPORT - ARR/DEP)  
 122.5000----AIR (AIRPORT - FSS)  
 121.9000----AIR (AIRPORT - GROUND)  
 275.8000----AIR (AIRPORT - GROUND)  
 118.1000----AIR (AIRPORT - TOWER)  
 236.6000----AIR (AIRPORT - TWR)  
 146.8200----AMATEUR (AMATEUR REPEATER - VE3TBR)  
 444.8250----AMATEUR (AMATEUR REPEATER - VE3TBR LINKED)  
 147.0600----AMATEUR (AMATEUR REPEATER - VE3YQT)  
 053.0500----AMATEUR (AMATEUR REPEATER - VE3OLA)  
 144.8500----AMATEUR (AMATEUR REPEATER - VE3BGA)  
 149.1700----EMS (THUNDER BAY EMS)  
 149.2150----EMS (THUNDER BAY EMS)  
 149.4400----EMS (THUNDER BAY EMS)  
 149.6050----EMS (THUNDER BAY EMS)  
 150.1000----EMS (THUNDER BAY EMS)  
 150.4850----EMS (THUNDER BAY EMS)  
 150.7550----EMS (THUNDER BAY EMS)  
 151.1300----EMS (THUNDER BAY EMS)  
 150.7550----EMS (THUNDER BAY EMS - EAST)  
 149.3350----EMS (THUNDER BAY EMS - WEST)  
 153.8000----FIRE (THUNDER BAY FIRE )  
 154.1900----FIRE (THUNDER BAY FIRE )  
 154.2800----FIRE (THUNDER BAY FIRE)  
 155.7450----FIRE (THUNDER BAY FIRE)  
 172.1100----FIRE (THUNDER BAY FIRE)  
 089.3000----MEDIA (CBON FRENCH FM BROADCAST)  
 143.0550----POLICE (THUNDER BAY POLICE DEPT - F1)  
 142.4100----POLICE (THUNDER BAY POLICE DEPT - F2)  
 143.0550----POLICE (THUNDER BAY POLICE DEPT - F3)  
 139.8000----POLICE (THUNDER BAY POLICE DEPT - F4)  
 142.0850----POLICE (THUNDER BAY POLICE DEPT)  
 142.4100----POLICE (THUNDER BAY POLICE DEPT)  
 142.5900----POLICE (THUNDER BAY

POLICE DEPT)  
 141.3900----POLICE (OPP)  
 141.1950----POLICE (OPP)  
 141.4500----POLICE (OPP)  
 141.5400----POLICE (OPP)  
 411.3125----POLICE (OPP - MOBILE REP)  
 858.4125----TAXI (SPARLY NEON)  
 170.1000----TAXI (DIAMOND CAB CO)  
 160.1850----TRAIN (CANADIAN PACIFIC)  
 460.4125----TRANSIT (THUNDER BAY TRANSIT - REP OUT)  
 461.1125----TRANSIT (THUNDER BAY TRANSIT - REP IN)  
 Notes ---- NO NOTES Revised 1998 Jan 02  
 National Frequency Database  
<http://www.agt.net/public/gpnet/gpnet.htm>

**From: Dana Schtun, VE3DSS**

**Date: April 20, 1998**

**Subject: 2 meter TE**

First Two Metre Trans-Equatorial Propagation DX Reported in Cycle 23  
 JR4ENY/1 reports that on April 16 at 1059 UTC JH4JPO in Yamaguchi, Japan using a TS790 and 16 el beam heard the VK8VF CW beacon on 144.480 MHz from Darwin, Australia – a distance of approximately 8000 km. Peak signal strength was RST559 at 1104 UTC. The reception faded out at 1125 UTC. This was the first opening between JA and VK in Cycle 23.

Canadian two metre operators are urged to watch for similar Trans-Equatorial Propagation openings with South America.

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 Guy Charron VA3FZA  
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 Radio Amateurs of Canada  
 Email: [va3fza@rac.ca](mailto:va3fza@rac.ca)  
 Packet: [va3fza@ve3kyt](mailto:va3fza@ve3kyt)



**From: Jim Dean, VE3IQ**

**Date: May 13, 1998**

**Subject:**

**70 CM AMATEUR BAND IN USA THREATENED**

The 70cm Amateur Radio band in the USA is under attack by commercial interests. The ARRL has advised U.S. radio amateurs (Bulletin ARLB030) that the U.S. Land Mobile Communications Council (LMCC) has asked the FCC to immediately reallocate 420 to 430 MHz and 440 to 450 MHz from the U.S. federal government to the Private Mobile Radio Service (PMRS) on a primary basis. Amateur Radio in the USA now enjoys the use of 420 to 450 MHz on a secondary basis, and the 430 to 440 MHz segment is an international allocation. The 70-cm band is the second most popular of the amateur radio service's VHF/UHF allocations, with substantial FM repeater and other operation in the 440 to 450 MHz segment and a variety of uses in the 420 to 430 MHz segment. RAC is

not aware of any similar initiative in Canada. Canadian radio amateurs use 430 to 450 MHz. on a secondary basis. The 420 to 430 MHz. band is not available to Canadian amateurs; it was reassigned to the Mobile (primary) and Fixed (secondary) services several years ago.

The FCC has called for comments by 1 June, 1998, on the LCMM's petition for rule making, designated RM 9267. The rule making is currently a domestic U.S. issue, but there could be international consequences if approved in whole or in part. Canadian amateurs should not take action at this time. RAC is monitoring the situation and consulting with the ARRL and IARU. RAC will advise of any action needed from the Canadian amateur radio community to assist these sister organizations in opposing the LMCC's initiative. In addition, RAC will raise the matter with Industry Canada at the 25 May CARAB meeting.

RAC will provide late-breaking information via the RAC web site and RAC Bulletins. Full reports will be included in The Canadian Amateur. Stay tuned.

Jim Dean, VE3IQ  
1134 Plante Drive, Ottawa, ON, Canada,  
K1V 9E8  
Telephone (613) 733-5585, fax (613) 733-  
5585.

# MRX: The Ultimate Morse Code Trainer

**By Bob, VA3ROM**

Do you want to learn the International Morse code and get on the HF bands? Written by John Samin, VK1EME, this program has been adopted by the ANZAC (Australian and New Zealand Defense Forces) as the Morse code trainer and John, is a code instructor. Yes, Morse code is being taught again in armed forces around the world. Why? With all those satellites in orbit, providing global communications coverage, who would want to use Morse code, these days? It would be impossible for a satellite, these days, to go awry and leave 50 million users in the dark, wouldn't it?

You can learn to send and receive Morse code from square one. MRX uses a flashcard method of learning the sound of the characters with the actual image of the character. You can hook up a handkey to your computer using several different methods and MRX will “listen” to your sending. MRX is available in both DOS and Windows 95/NT versions and uses your soundcard to sound the Morse characters. If you have a large class to instruct, a network version is available for up to 25 students.

I tried out MRX and was very impressed. I've used all kinds of Morse code tutors and practice programs; MRX blows them all away. I especially like the QRM and Manual code adjustments that you can make. You can adjust the level of background noise (like real HF radio QRM) and the "fist" of the program. MRX can send machine

perfect code or can be adjusted to send more like a human sender to a totally bad sender. Anyone can copy machine perfect code, but add some noise and hesitation and short or long spacing, dots and dashes and the code doesn't sound quite the same.

MRX comes with a lot of exercises to train you on numbers, letters, plain text and cipher copy. You get constant feedback from the program and it keeps track of your progress. Since it is used as a professional training tool by the military, you aren't going to get away with anything with this program! Anyone can get his or her 5-wpm with this program; it just takes 10 to 15 minutes a day of practice.

You can download MRX and a utility Code Sheet Generator program to make your own code exercises from <http://www.ozemail.com.au/~jwsamin>. Visit John's site and take a look. We have adopted this program for training at Thunder Bay Coast Guard Radio for the rookie code operators. It's a lot of fun and you will get results. The program is just that good, well, John, VK1EME is just that good as an instructor.

## GPS User Alert

GPS System Time will roll over at midnight 21-22 August 1999, 132 days before the Year 2000. On 22 August 1999, unless repaired, many GPS receivers will claim that it is 6 January 1980, 23 August will become 7 January, and so on. Accuracy of navigation may also be severely affected. Although it appears that GPS broadcasts do contain sufficient data to ensure that navigation need not be affected by rollover in 1999, it is not proven that the firmware in all receivers will handle the rollovers in stride; some receivers may claim wrong locations in addition to incorrect dates.

Some manufacturers have already solved the problem, but some have not. The firmware

in all affected (mostly older) receivers will have to be replaced. This will involve replacement of PROMs; some are socketed, some are soldered. As a technical matter, the solution is quite simple. It's the logistics that will take some effort. Without a GPS Simulator, there is no way for users to test a GPS receiver for this problem. Users are encouraged to contact their receiver manufacturer to determine if their receiver will be affected, in particular if a failure of navigation could put lives or property at risk."

For information on this and other USCG subjects you can visit the United States Coast Guard website at: <http://www.navcen.uscg.mil/>.

*From Wayno's glossary of absolutely wonderful electronic terms*

!!@#%&\*^%^%#@: what you say when  
nothing goes right

**serrodyne**-A frequency translator or frequency converter, based on linear sawtooth modulation of phase shift or time delay. One convenient modulable device for serrodyne use is a traveling-wave tube, which provides gain as well as frequency translation.

*Thanks for all the support this last year it's been a learning curve doing the HI-Q Couldn't have done it with-out all the submittals and advice. Can't say for sure wether or not I will be the Editor in the fall so if anyone wants to take on the Editorship they are welcome to it.. Have a safe and pleasant summer. 73 & 88 to one and all. HI-Q Editor Wayne Letang VA3WRL*

Answers for Junes Puzzler: Wiring, piezo, willow, shower and VE3XT=low-power